

Notice of Allowability

Application No.

10/500,111

Examiner

Ling-Siu Choi

Applicant(s)

KOMOTO ET AL.

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1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed 10/19/2006.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. This Office Action is in response to the Amendment filed October 19, 2006.

Claims 1-10 are now pending.

Allowable Subject Matter

2. Claims 1-10 are allowed.

3. The following is an examiner's statement of reasons for allowance:

The present claims are allowable over the closest references: Urata et al. (US 6,586,525 B1) and Ueda et al. (EP 1 065 245 A1).

Summary of claim1

A binder resin composition comprising:	
A	a chlorinated <u>isotactic</u> propylenic <u>random</u> copolymer having weight average molecular weight of 3,000 to 250,000 and M_w/M_n of <u>less than 2</u> , wherein the chlorinated isotactic propylenic random copolymer is obtained by copolymerizing propylene with other α -olefins using <u>metallocene</u> catalyst and chlorinating to a chlorine content of 10-40% by weight based on the total weight of the binder resin composition
B	a stabilizer
C	an organic solvent

Urata et al. disclose a binder resin comprising carboxyl group-containing chlorinated polyolefin and a stabilizer, wherein the polyolefin can be a propylene- α -olefin copolymer having weight average molecular weight of 10,000 to 150,000; the carboxyl group-containing chlorinated polyolefin has a chlorine content from 10 to 30 wt%; the unsaturated carboxylic acid monomer used to introduce carboxyl group to the polyolefin is maleic acid, maleic anhydride, fumaric acid in an amount of 1 to 10 wt% to polyolefin; and the stabilizer is an epoxy compound (abstract; col. 2, lines 53-67; col. 3, lines 1-4, 20-31, and 39-49; col. 5, line 67; col. 6 line 1). However, Urata et al. do not teach or fairly suggest a binder resin composition comprising a chlorinated isotactic propylenic random copolymer having weight average molecular weight of 3,000 to 250,000 and a Mw/Mn of less than 2, which is obtained by copolymerizing propylene with other α -olefins in the presence of metallocene catalyst and chlorinating to a chlorine content of 10-40% by weight based on the total weight of the binder resin composition.

Ueda et al. disclose a binder resin composition comprising carboxyl group-containing chlorinated polyolefin resin and an stabilizer, wherein the carboxyl group-containing chlorinated polyolefin has chlorine content of 0.1 to 40 wt%, grafting level of α , β -unsaturated carboxylic acid and/or its acid anhydride of 0.5 to 10 wt%, and weight average molecular weight of 30,000 to 220,000 and the stabilizer is an epoxy compound (abstract; [0030]-[0031]; [0041]-[0046]). Ueda et al. further disclose that the polyolefin is produced in the presence of a metallocene and is a syndiotactic polyolefin ([0011]-[0013]). Thus, Ueda et al. do not teach or fairly suggest a binder resin

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composition comprising a chlorinated isotactic propylenic random copolymer having weight average molecular weight of 3,000 to 250,000 and a Mw/Mn of less than 2, which is obtained by copolymerizing propylene with other α -olefins in the presence of metallocene catalyst and chlorinating to a chlorine content of 10-40% by weight based on the total weight of the binder resin composition.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.



LING-SUI CHOI
PRIMARY EXAMINER

December 20, 2006